INDEX

Α

Abraitys, V. Y., 27-38

Absorption spectrophotometry, cooling arrangements for, 99-102

Acetone, photocycloaddition reaction, with 1,2-dicyanoethylene, 277-310 with 1-methoxy-1-propene, 277-310

Alkanones, cyclic, molecular photochemistry of, 91-97 quenching of fluorescence of, 345-349

Anilines, singlet and triplet quenching studies on, 185-190

Arnold, D. R., 27-38

Aryl ketones, nonconjugated type, excited state carbonyl-phenyl interactions in, 77-80

Azulene, photoisomerization, 63-66
Azastilbenes, cis-trans isomerization
photosensitized by biacetyl, 311-321
Azoxybenzene, photoreduction of by

Azoxybenzene, photoreduction of by chemical sensitization, 213-223

В

Baird, N. C., 53-61

Benperidol, spectroscopic studies on, 1-26 Benzaldehyde, phosphorescence of, deuterium and solvent effects on, 115-120

photocyclo addition reaction with trimethylene, 277-310

Benzene, as hydrogen donor in photoreduction of benzophenone, 331-339 Benzophenone, photoreduction of,

benzene as hydrogen donor in, 331-339 Benzylacetone, photoreduction (at-

Benzylacetophenone, photoreduction, 87-89

tempted), 87-89

Bergman, B., 341-344

Biacetyl, as photosensitizer of cis-trans isomerization of azastilbenes, 311-321 Bortulus, P., 311-321

Brinen, J. S., 121-131

Butyrophenone, temperature effects on type II reactions of, 73-76

C

Carbonyl compounds, photocyclo addition reactions with olefins, 277-310

Carbonyl-phenyl interactions, in nonconjugated aryl ketones, 77-80

Carbonyl sulfide, electronically excited, primary processes in, 177-184

Carbostyril, from photochemical rearrangement of quinoline N-oxide, 323-329

Cholest-4-en-3-one, as sensitizer of stilbene isomerization, 145-152

Comtet, M., 63-66

Cooling arrangements for spectrophotometry of various types, 99-102

Coumarin, spectroscopic studies on, 191-211

Curtis, H. C., 331-339

α-Cycloalkoxyacetophenones, photochemistry of, 259-264

Cyclobutanone, photoreduction by trin-butylstannane, 39-52

Cyclohexanone, photoreduction by trin-butylstannane, 39-52 in sensitization of stilbene isomerization, 145-152

Cyclopentanone, photoreduction by trin-butylstannane, 39-52

in sensitization of stilbene isomerization, 145-152

D

Dalton, J. C., 67-71, 91-97, 133-144, 353 de Mayo, P., 145-152

1,2-Dicyanoethylene, photocycloaddition reaction with acetone, 277-310 quenching of cyclic alkanone fluorescence by, 345-349 Diethoxyethylene, quenching of cyclic alkanone fluorescence by, 345-349 3,3-Dimethylcyclobutanone, photoreduction by tri-n-butylstannane, 39-52

Droperidol, spectroscopic studies on, 1-26

Emission spectrophotometry, cooling arrangements for, 99-102
Enones, cyclic, in sensitization of isomerization of stilbene, 145-152
ESR spectrophotometry, cooling arrangements for, 99-102

F

Favaro, G., 311-321, 323-329 Fischer, E., 99-102 p-Fluorobutyrophenone, neuroleptic derivatives, spectroscopic studies, 1-26

G

Gallivan, J. B., 191-211 Gerhardt, G. E., 121-131 Giles, W. B., 277-310 Gollnick, K., 177-184 Graber, D. R., 81-85

Hirsch, R. H., 259-264

H

Haloperidol, spectroscopic studies on, 1-26 Hammond, G. S., 225-250 Harada, N., 153-164 Haug, A., 81-85 Herndon, W. C., 277-310 Hydrazobenzene photolysis in solution, 165-176
 α-o-Hydroxyphenyl-N-phenyl nitrone, photoisomerization of, intramolecular hydrogen bonding effects on, 153-164

1

1-Indanone, acidity of α-protons in triplet states of, 341-344 Intramolecular energy transfer, ESR and luminescence studies of, 121-131 Intramolecular excitation transfer, in spectroscopic studies of p-fluorobutyrophenone derivatives, 1-26

J

Jones, B., 331-339

K

Kavarnos, G., 73-76
Kayoiji, H., 165-176, 353
Kelso, P. A., 81-85
Kemppainen, A. E., 81-85
Ketones, cyclic, photoreduction by trin-butylstannane, 39-52
electronically excited, conformational analysis of, 345-349
triplets of, deactivation by
β-phenyl substitution, 81-85
Kirkiacharian, B. S., 145-152

L

Lamola, A. A., 265-276 Lee, T.-J., 185-190 Leppin, E., 177-184 Lewis, F. D., 67-71, 259-264, 265-276 Lim, E. C., 341-344 Literature highlights, January-June, 1969, 103-110 Long, M. E., 341-344

M

Mazzucato, U., 311-321 McDaniel, D. M., 39-52 Meluzova, G. B., 251-257 α-Methoxyacetophenone, temperature effects on type II reactions of, 73-76 1-Methoxy-1-propene, photocycloaddition reaction with acetone, 277-310 N-Methyl-2-pyridone, photoreactions of, 225-250 Mettee, H. D., 63-66 Monroe, B. M., 213-223 Mori, Y., 153-164 Morita, T., 165-176, 353 Muralidharan, V. P., 87-89

N

Neuroleptic derivatives of p-fluorobutyrophenone, spectroscopic studies, 1-26
Nicholson, A. A., 145-152
Nicodem, D. E., 87-89
Niemczyk, M., 345-349
Nitrone, photoisomerization of, effects on intramolecular hydrogen bonding on, 153-164
Norbornene, electronic excited state of, 27-38

0

O'Donnell, C. M., 87-89
Offen, H., 115-120
Olefins, electronic excited state of, 27-38
photocycloaddition reactions of carbonyl compounds with, 277-310

P

Perturbational molecular orbital theory, 277-310

Phenols, singlet and triplet quenching studies on, 185-190 β-Phenyl substitution, deactivation of ketone triplets by, 81-85 Photochemical reactions, kinetic analyses of, 133-144 Photochemistry, Third IUPAC Symposium on July 12-18, 1970, report on meeting, 265-276 Pipamperone, spectroscopic studies on, 1-26 Pond, D. M., 345-349 Punch, W. E., 77-80 Pyrogallol, chemiluminescent oxidation of stoichiometry. 251-257

0

Quenching mechanism, studies on using phenols and anilines, 185-190 Quinoline N-oxide, photochemical rearrangement to carbostyril, 323-329

S

Saltiel, J., 331-339

Sharp, L. J., 225-250
Shizuka, H., 165-176, 353
Simpson, J., 115-120
Spectrophotometry cooling arrangements for various types of, 99-102
Spiroperidol, spectroscopic studies on, 1-26
Stermitz, F. R., 87-89
Stilbene, cis-trans isomerization of, sensitized by cyclic enones, 145-152 cis-trans isomers, singlet energy

T

transfer to, 67-71

Tanaka, I., 153-164
Taylor, G. N., 103-110
4-(4-p-Terphenylylmethyl)-benzophenone, intramolecular energy transfer studies on, 121-131

- 2-(4-p-Terphenylylmethyl)-triphenylene, intramolecular energy transfer studies on, 121-131
- Testosterone and derivatives, as sensitizers of stilbene isomerization, 145-152
- Tetramethylethylene, electronic excited state of, 27-38
- Thiery, C., 1-26
- Tri-n-butylstannane, photoreduction of cyclic ketones by, 39-52
- Tricyclodeca-3-ene-2-one, as sensitizer of stilbene isomerization, 145-152
- Trimethylene, photocycloaddition reaction with benzaldehyde, 277-310 Triplets, twisted π.π* type, energies of
- Triplets, twisted π,π^* type, energies of, 53-61

Turro, N. J., 39-52, 67-71, 73-76, 91-97, 133-144, 185-190, 345-349, 353
Twisted triplets, energies of, 53-61

V

Vassil'ev, R. F., 251-257

W

Wagner, P. J., 81-85 Wamser, C. C., 213-223 Weiss, D. S., 91-97 Whitten, D. G., 77-80

